

08/04/2006 10/519,831 Kim

=> d his full

(FILE 'HOME' ENTERED AT 15:45:46 ON 04 AUG 2006)

FILE 'REGISTRY' ENTERED AT 15:45:59 ON 04 AUG 2006

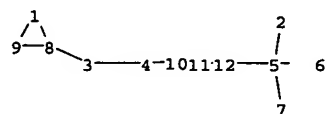
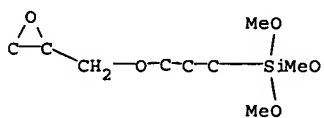
L1 49379 SEA ABB=ON PLU=ON EPOXY RESIN/PCT  
L2 1 SEA ABB=ON PLU=ON TIN OCTYLATE  
D IDE  
L3 1 SEA ABB=ON PLU=ON METAL SOAP  
D IDE  
L4 STRUCTURE UPLOADED  
L5 50 SEA SSS SAM L4  
L6 2170 SEA SSS FUL L4  
L7 5754104 SEA ABB=ON PLU=ON AMINE OR AMIDE

FILE 'CAPLUS' ENTERED AT 15:49:51 ON 04 AUG 2006

L8 75574 SEA ABB=ON PLU=ON L1  
L9 473 SEA ABB=ON PLU=ON L2 OR L3  
L10 40 SEA ABB=ON PLU=ON L8 AND L9  
L11 2 SEA ABB=ON PLU=ON L10 AND L6  
D IBIB ABS HITSTR HITIND 1-2  
SET LINE 250  
SET DETAIL OFF  
E METAL SOAPS+ALL/CT  
SET LINE LOGIN  
SET DETAIL LOGIN  
L12 24654 SEA ABB=ON PLU=ON METAL? SOAP OR COPPER NAPHTH? OR TIN  
OCTYLATE OR (TIN OR SN OR ZINC OR ZN OR ALUMINUM OR AL OR  
MANGANESE OR MN) (2W) (OCTYL? OR NONYL? OR STEAR? OR NAPHTH? OR  
OCTHIX?)  
L13 556 SEA ABB=ON PLU=ON L8 AND L12  
L14 6 SEA ABB=ON PLU=ON L13 AND L6  
L15 4 SEA ABB=ON PLU=ON (?AMINE OR ?AMIDE) AND L14  
L16 3 SEA ABB=ON PLU=ON L15 NOT L11  
D IBIB ABS HITSTR HITIND 1-3  
L17 37175 SEA ABB=ON PLU=ON ?METHOXYSILAN? OR ?OXIRANYL? (3W) (SILAN?)  
OR ?METHOXY? (3W) (SILAN?)  
L18 19 SEA ABB=ON PLU=ON L13 AND L17  
L19 8 SEA ABB=ON PLU=ON (?AMINE OR ?AMIDE) AND L18  
L20 5 SEA ABB=ON PLU=ON L19 NOT L15  
D IBIB ABS HITSTR HITIND 1-5

FILE 'JAPIO, KOREAPAT' ENTERED AT 16:14:25 ON 04 AUG 2006

L21 74143 SEA ABB=ON PLU=ON EPOXY OR ?BISPHEENOL? OR EPIKOTE  
L22 171 SEA ABB=ON PLU=ON L21 AND L12  
L23 1 SEA ABB=ON PLU=ON L17 AND L22  
D IALL  
L24 0 SEA ABB=ON PLU=ON L22 AND (ORGANO? (W) (SILICON OR SI OR  
SILAN?))



chain nodes :

2 3 4 5 6 7 10 11 12

ring nodes :

1 8 9

chain bonds :

2-5 3-8 3-4 4-10 5-6 5-7 5-12 10-11 11-12

ring bonds :

1-8 1-9 8-9

exact/norm bonds :

1-8 1-9 4-10 8-9

exact bonds :

2-5 3-8 3-4 5-6 5-7 5-12 10-11 11-12

Match level :

1:Atom 2:CLASS3:CLASS4:CLASS5:CLASS6:CLASS7:CLASS8:Atom 9:Atom 10:CLASS11:CLASS  
12:CLASS

08/04/2006 10/519,831 Kim

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:105259 CAPLUS  
DOCUMENT NUMBER: 132:152953  
TITLE: Storage-stable one-liquid epoxy resin adhesive  
compositions exhibiting high adhesion  
INVENTOR(S): Kotani, Hiroshi; Takeda, Toshimitsu; Adachi, Naoya;  
Okudaira, Hiroyuki  
PATENT ASSIGNEE(S): Yokohama Rubber Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000044914	A2	20000215	JP 1998-218866	19980803
PRIORITY APPLN. INFO.:			JP 1998-218866	19980803

AB The compns. comprise (A) 100 parts epoxy resins having  $\geq 2$  epoxy groups, (B) compds. having  $\geq 2$  ketimine groups in an amount to satisfy an imino/epoxy equivalent ratio of (0.5-2)/1, and (C) 1-30 parts compds. which release  $\geq 1$  Cl-5 alcs. by hydrolysis and/or 0.1-10 parts C4-12 organic acid metal soaps containing Groups 7A to 5B elements. Thus, a composition comprising epoxy resin (YD 128) 100, precipitated  $\text{CaCO}_3$  70, heavy  $\text{CaCO}_3$  30, norbornanediamine Me iso-Pr ketone ketimine 38, and vinyltriethoxysilane 5 parts showed viscosity 96 Pa-s initially and 180 after 1 day at  $70^\circ$  and good adhesion to mortar.

IT 4288-15-7, Nikka Octhix Tin  
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high adhesion)

RN 4288-15-7 CAPLUS

CN Octanoic acid, tin salt (8CI, 9CI) (CA INDEX NAME)

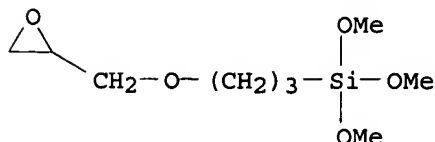
$\text{HO}_2\text{C}-(\text{CH}_2)_6-\text{Me}$

●x Sn(x)

IT 2530-83-8  
RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high adhesion)

RN 2530-83-8 CAPLUS

CN Silane, trimethoxy[3-(oxiranylmethoxy)propyl]- (9CI) (CA INDEX NAME)



EIC 2800 MARY S. MIMS 272-5928

08/04/2006 10/519,831 Kim

IT 113930-69-1P 124679-18-1P 215722-08-0P,  
NBDA-YD 128 copolymer  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
engineered material use); PREP (Preparation); USES (Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high  
adhesion)

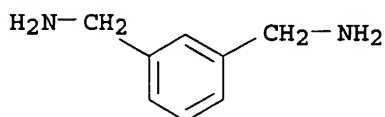
RN 113930-69-1 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 1,3-  
benzenedimethanamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 1477-55-0

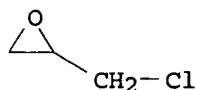
CMF C8 H12 N2



CM 2

CRN 106-89-8

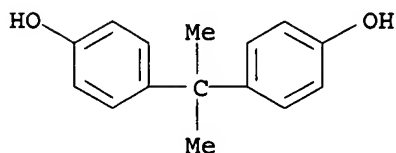
CMF C3 H5 Cl O



CM 3

CRN 80-05-7

CMF C15 H16 O2



RN 124679-18-1 CAPLUS

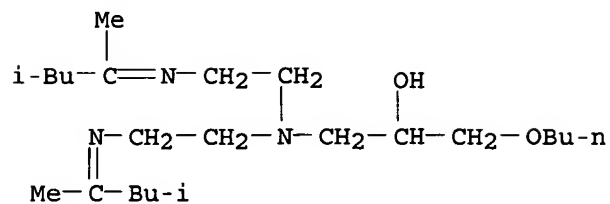
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 1-[bis[2-[(1,3-  
dimethylbutylidene)amino]ethyl]amino]-3-butoxy-2-propanol and  
(chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 37187-55-6

CMF C23 H47 N3 O2

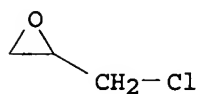
08/04/2006 10/519,831 Kim



CM 2

CRN 106-89-8

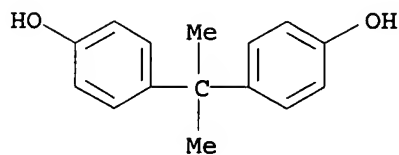
CMF C3 H5 Cl O



CM 3

CRN 80-05-7

CMF C15 H16 O2



RN 215722-08-0 CAPLUS

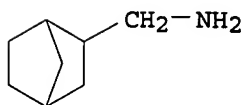
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with bicyclo[2.2.1]heptane-2,?-dimethanamine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 62196-77-4

CMF C9 H18 N2

CCI IDS

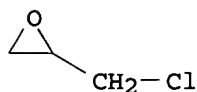


D1-CH2-NH2

CM 2

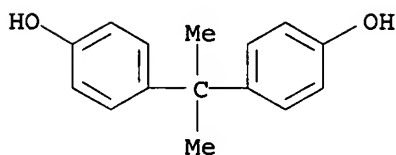
08/04/2006 10/519,831 Kim

CRN 106-89-8  
CMF C3 H5 Cl O



CM 3

CRN 80-05-7  
CMF C15 H16 O2



IC ICM C09J163-00  
ICS C08G059-40  
CC 38-3 (Plastics Fabrication and Uses)  
IT 557-09-5, Nikka Octhix Zinc 4288-15-7, Nikka Octhix Tin  
15956-58-8 107129-35-1, Nikka Octhix Lead  
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high  
adhesion)  
IT 78-08-0 149-73-5, Methyl orthoformate 1067-53-4, Vinyltris(2-  
methoxyethoxy)silane 2530-83-8 2768-02-7  
RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES  
(Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high  
adhesion)  
IT 113930-69-1P 124679-18-1P 215722-08-0P,  
NBDA-YD 128 copolymer  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
engineered material use); PREP (Preparation); USES (Uses)  
(storage-stable one-liquid epoxy resin adhesive compns. exhibiting high  
adhesion)

08/04/2006 10/519,831 Kim

L20 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:94923 CAPLUS

DOCUMENT NUMBER: 138:161951

TITLE: Thermosetting epoxy resin compositions in manufacture of multilayer printed circuit boards

INVENTOR(S): Ota, Naoko; Kimura, Norio; Yoshida, Masato

PATENT ASSIGNEE(S): Taiyo Ink Mfg Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003037368	A2	20030207	JP 2001-223535	20010724
PRIORITY APPLN. INFO.:			JP 2001-223535	20010724

AB The title compns. contain: (A) alkoxy group containing silane modified epoxy resins which are obtained by alc.-removal condensation reaction without use of solvents of (a) binary hydroxide group containing multifunctional epoxy resins 1 mass parts, and (b) alkoxysilane partial condensates 0.1-0.5 mass parts (in terms of SiO<sub>2</sub>); (B) epoxy resin hardening agents, and (C) silanol condensation acceleration agents. Manufacture of multilayer printed circuit boards includes: (1) deposition of the compns. on pattern-worked inner-layer circuit substrates, and forming insulator layers through thermal hardening, silanol condensation reaction and epoxy resin hardening, (2) forming contact holes in the insulator layers, and (3) roughening the insulator layer surface, and forming elec. conductive layers on them. The multilayer printed circuit boards thus manufactured have excellent heat resistance, cracking resistance and elec. insulation.

IT 25068-38-6, Epikote 828

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)

(thermosetting epoxy resin compns. in manufacture of multilayer printed circuit boards)

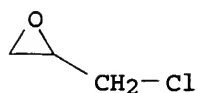
RN 25068-38-6 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

CMF C3 H5 Cl O

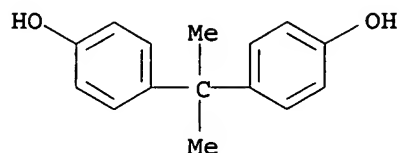


CM 2

CRN 80-05-7

CMF C15 H16 O2

08/04/2006 10/519,831 Kim



IC ICM H05K003-46  
ICS H05K003-46; C08G059-14; C08G059-30  
CC 76-2 (Electric Phenomena)  
Section cross-reference(s): 38  
IT 7631-86-9, Silica, processes **25068-38-6**, Epikote 828  
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)  
(thermosetting epoxy resin compns. in manufacture of multilayer printed circuit boards)  
IT 461-58-5, Dicyano **diamide** 4288-15-7, **Tin octylate**  
RL: MOA (Modifier or additive use); USES (Uses)  
(thermosetting epoxy resin compns. in manufacture of multilayer printed circuit boards)  
IT 25498-03-7, **Polymethyltrimethoxysilane**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(thermosetting epoxy resin compns. in manufacture of multilayer printed circuit boards)



08/04/2006 10/519,831 Kim

L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:538298 CAPLUS

DOCUMENT NUMBER: 137:95326

TITLE: Curable compositions for sealants with good curability in thin layers

INVENTOR(S): Yano, Satoko; Okamoto, Toshihiko; Takase, Junji

PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201369	A2	20020719	JP 2001-1143	20010109
PRIORITY APPLN. INFO.:			JP 2001-1143	20010109

OTHER SOURCE(S): MARPAT 137:95326

AB The compns. contain (A) polymers having OH or hydrolyzable group bonded to Si, (B) silanol condensation catalysts, and (C) secondary amines having (un)substituted saturated C<sub>≥6</sub> hydrocarbyl group. Thus, a composition containing

reactive silyl group-terminated polyisobutylene [manufactured from p-C<sub>6</sub>H<sub>4</sub>(CMe<sub>2</sub>Cl)<sub>2</sub>, isobutylene, allyltrimethylsilane, and (MeO)<sub>2</sub>SiHMe], process oil, Epikote 828, hydrogenated α-olefin oligomer, CaCO<sub>3</sub>, Aronix M 309, and other additives was mixed with a hardener comprising U 28 (Sn octylate) and dicyclohexylamine to give a sealant showing skinning time 265 min and good curability after coating on a substrate.

IT 25068-38-6, Epikote 828

RL: TEM (Technical or engineered material use); USES (Uses)  
(curable compns. for sealants with good curability in thin layers)

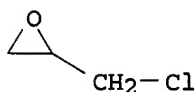
RN 25068-38-6 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

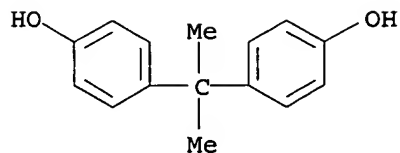
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



- IC ICM C08L101-10  
ICS C08K005-17; C09K003-10  
CC 42-11 (Coatings, Inks, and Related Products)  
ST sealant thin layer curability secondary **amine**; silyl  
polyisobutylene sealant curability secondary **amine**  
IT 101-83-7, **Dicyclohexylamine**  
RL: CAT (Catalyst use); USES (Uses)  
(cocatalyst; curable compns. for sealants with good curability in thin layers)  
IT 762-72-1DP, Allyltrimethylsilane, reaction products with  
chlorine-terminated polyisobutylene and **methyldimethoxysilane**  
16881-77-9DP, **Methyldimethoxysilane**, reaction products with  
allyl-terminated polyisobutylene 74485-54-4DP, reaction products with  
allyltrimethylsilane and **methyldimethoxysilane**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(curable compns. for sealants with good curability in thin layers)  
IT **25068-38-6**, Epikote 828 36446-02-3, Aronix M 309 homopolymer  
304855-40-1, MS Polymer S 810  
RL: TEM (Technical or engineered material use); USES (Uses)  
(curable compns. for sealants with good curability in thin layers)